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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,215	09/19/2006	Christian Birkner	22307-US	6868

22829 7590 09/07/2007  
ROCHE MOLECULAR SYSTEMS INC  
PATENT LAW DEPARTMENT  
1145 ATLANTIC AVENUE  
ALAMEDA, CA 94501

EXAMINER
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CHUNDURU, SURYAPRABHA

ART UNIT	PAPER NUMBER
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1637

MAIL DATE	DELIVERY MODE
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09/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/573,215

**Applicant(s)**

BIRKNER ET AL.

**Examiner**

Suryaprabha Chunduru

**Art Unit**

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 13 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/12/06</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Applicant's election without traverse of Group I (claims 1-8) in the reply filed on August 23, 2007 is acknowledged.

***Status***

2. Claims 1-8 are considered for examination. Claim 13 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group. This is made FINAL.

***Information Disclosure Statement***

3. The Information Disclosure Statement filed on June 12, 2006 has been considered.

***Priority***

4. This application filed on September 19, 2006 is a 371 of PCT/EP04/13627 filed on 12/01/04, which claims priority to EPO 03027754.5 filed on 12/02/2003.

***Informalities***

5. The following informalities are noted:

(i) Claim 1 recites 'Method for'. 'A method for' is suggested.

(ii) Claim 2 recites 'between 0.1 to 8M'. 'between 0.1 and 8M is suggested.

(iii) Claims 4, 7 recite 'wherein the incubation temperature'. 'wherein the incubation in step d) and step e) is at temperature between 0<sup>0</sup> and 90<sup>0</sup> C' is suggested.

(iv) Claims 5, 8 recite 'wherein the incubation time'. 'wherein the incubation in step d) / step e) is between 30min and 48 hours'.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-5, 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4-5 and 7-8 recite the limitation "the incubation temperature / the incubation time" in line 2 of the claims. There is insufficient antecedent basis for this limitation in the claim. Claim 1, upon which the instant claims depend recite incubation and the limitation the incubation temperature/ the incubation time' lacks support in the claim 1 upon which they depend. The meets and bounds of the claims is unclear and vague because the independent claim 1 lacks support for said limitations in the instant claims.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Zon et al. (US Pub No.2005/0153308 A1).

Zon et al. teach a method of claim 1, for the conversion of a cytosine base in a nucleic acid to an uracil base comprising

(a) providing a solution that contains a nucleic acid (see at least page 1, paragraph 0007, 0013, page 2, paragraph 0014);

(b) providing guanidinium hydrogen sulfite (bisulfite (=hydrogen sulfite) + guanidine compound) and preparing a solution comprising guanidinium and sulfite ions (see at least page 1, paragraph 0007-0010, 0013, page 2, paragraph 0022, 0025);

(c) mixing the solutions from step (a) and (b) (see at least page 1, paragraph 0007, 0013);

(d) incubating the solution obtained in step (c) containing the nucleic acid and guanidinium and sulfite ions whereby the nucleic acid is deaminated (see at least page 2, paragraph 0014, page 3, paragraph 0041);

(e) incubating the deaminated nucleic acid under alkaline conditions whereby the deaminated nucleic acid is desulfonated (see at least page 2, paragraph 0015);

(f) isolating the deaminated nucleic acid (see at least page 3, paragraph 0041).

With regard to claim 2, Zon et al. teach that the cocentration of guanidinium ions and sulfite ions is between 0.1 and 8M (see at least page 1-2, paragraph 0013).

With regard to claim 3, Zon et al. teach that the pH of solutions in step (b) and step (c) is less than 7.0 ( see at least page 4, paragraph 0044, and 0047, table 1).

With regard to claims 4-5, 7-8, Zon et al teach the incubation temperature is between 0<sup>0</sup> C and 90<sup>0</sup> C (see at least page 2, paragraph 0014).

With regard to claim 6, Zon et al. teach that the step (e) is performed by adding an alkaline solution (see at least page 2, paragraph 0015). Accordingly Zon et al. anticipates the instant claims.

### ***Conclusion***

No claims are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 571-272-0783. The examiner can normally be reached on 8.30A.M. - 4.30P.M , Mon - Friday,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Suryaprabha Chunduru  
Primary Examiner  
Art Unit 1637

*Suryaprabha Chunduru*  
SURYAPRABHA CHUNDURU 9/3/07  
PRIMARY EXAMINER